

## **PROJECT PROPOSAL**

### **PART-A**

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|------------|-----------------------------------|---|
| <b>1.0</b> | <b>Title of the Project:</b>      | <b>Design and Development of E-Learning Platform and Faculty Profile System</b> |
|            | <b>Area of Research:</b>          | Others  |
| <b>1.1</b> | <b>Principal Investigator</b>     | Dr.Shijith Kumar C  |
| <b>1.2</b> | <b>Principal Co-investigators</b> | Mr. Manohar, N.<br>Dr. Malar G.   |
| <b>1.3</b> | <b>Collaborating Institution</b>  | Nil   |
| <b>1.4</b> | <b>Total Grants required</b>      | Rs. 5.04 lakhs  |
| <b>1.5</b> | <b>Duration of the Project</b>    | 12 months   |

## **2.0 Project Summary**

E-learning platform and faculty profile system are two technological innovations capable of reshaping the higher education and research. The objectives of this project are to design and develop an e-learning platform and a web-based faculty profile system for the institute using open source software tools and techniques. Appropriate software applications will be selected and customized for the design and development of both the systems by making a comparative evaluation of the major open source applications in the respective fields.

## **3.0 Introduction**

The developments in Information and Communication Technology and the resulting technological innovations are rapidly transforming the way higher educational and research institutions are conducting teaching, learning and research activities and disseminating their scholarly output. Two such important technological innovations which improve the quality of higher education and scholarship are e-learning platform and online faculty profile system. While e-learning platform is a relatively mature innovation that facilitates virtual learning environment for delivering, administering and assessing training programmes (Bryn & John, 2006), the online faculty profile system is an emerging innovation which facilitates collection, storage and display of structured data on faculty publications, research and scholarly activities. (Givens, Macklin, & Mangiafico, 2017).

The All India Institute of Speech and Hearing has always been an early adopter of new information and learning technologies and services. Video conferencing system, campus wide network with wifi facility, smart class rooms, Internet browsing centre, language lab, remote access information service, web-based plagiarism checking and digital repository are some of the educational technologies and ICT infrastructure facilities that the Institute implemented in the last ten years. However, e-learning activities in the Institute are still at an infancy stage. An informal preliminary investigation revealed that our e-learning activities are limited to the use of freely available e-learning tools such as google open education tools, Moodle Cloud and the instructional support tools available with Turnitin, the antiplagiarism tool that the Institute subscribes. Faculty members are not using e-learning tools or platforms to their maximum potential and delivering an entire course content online. On the other hand, a number of prominent educational institutes in the country and abroad are putting up their courses on the web and helping the students to harness the benefits of e-learning technologies. Also, our faculty profile system needs to be upgraded from the static pages with publication details displayed on the Institute website

to a dynamic, integrated and interactive system like hundreds of institutions across the world who are making use of dynamic open source tools for showcasing their faculty profile and scholarly activities.

### **3.1 Objectives of the Project**

The main objectives of the project are to design and develop an e-learning platform and a web-based faculty profile system for the institute using open source tools and techniques. The specific objectives are:

1. To provide an open, flexible and reliable educational technology base for the Institute
2. To create a blended learning environment conducive for both the learners and educators
3. To develop e-learning resources and tools that meet the educational requirements of the Institute
4. To address the need for capacity building in e-learning technologies among the faculty and students
5. To formulate a policy on the adoption and use of e-learning system for the Institute
6. To capture, preserve and disseminate the Institute's collective scholarly works and transform scholarly communication
7. To create an integrated and dynamic web-based record of scholarly output of the Institute

## **4.0 Work Plan**

### **4.1 Materials and Methods**

#### E-Learning Platform

1. Selection of appropriate software for the development of e-learning platform through a comparative evaluation of the major open source learning management systems including Moodle and ATutor. Criteria like community support, compatibility with the existing instructional support tools like Turnitin, ease of access and facility for uploading of content including completed assignments by the students from off campus locations will be considered while evaluating the candidate software applications.
2. Beta installation of the selected software on a temporary system with limited computing power and customization of the software tools as per the requirement.
3. Selection of pilot users from among the faculty members based on their experience in using eLearning platforms and tools and obtaining feedback.

4. Development of a few trial courses using the core features and facilities of the selected software.
5. Training the faculty members on developing content for the courses with hands-on sessions and one-on-one consultation as required.
6. Setting up of full courses on a permanent server and integration of the software with the existing system.
7. Trial run and feedback from faculty and students.
8. Finalization of the system.
9. Training for the students.

#### Faculty Profile System

1. Selection of appropriate software for the development of faculty profile system through a comparative evaluation of the features of major open source learning management systems including VIVO, Opus and BibApp.
2. Beta installation of the selected software on a temporary system with limited computing power.
3. Customization of the software application as per the requirement of the Institute.
4. Collection of information on faculty publication, funded research projects, classes taught and other scholarly activities through questionnaire and entering the details into the system developed.
5. Importing additional profile information from authoritative institutional data sources like digital repository and external sources
6. Trial run
7. Setting up of the system on a permanent server
8. Orienting faculty and getting feedback
9. Finalization of the system

#### **5.0 Budget Summary**

<b>SNo.</b>	<b>Item</b>	<b>Expenditure (Rs.)</b>

1	Salary for Research Officer No. of posts: One Qualifications: MCA/ M.Sc. Computer Science. Salary: (Rs.42,000 x 12 months) Justification: A fulltime research officer with Master's degree Computer Science/ Application is required for the project for software development	5.04 lakhs
2.	Consumables	Nil
3	Travel	Nil
4.	Other Costs	Nil
Total		5.04 lakhs

## 6.0 Implications of the Study

The present project is expected to have the following implications:

1. The E-learning system will improve collaborative learning in the Institute
2. It will also facilitate flexibility in learning and teaching activities
3. The Faculty Profile System will enhance the accessibility of faculty research output to a global audience.

## 7.0 Utilization of the Study

Both the e-learning platform and faculty profile system will be deployed in the Institute after getting the necessary approval from the competent authority.

## 8.0 Roles and Responsibilities

SNo.	Investigator	Roles and Responsibilities	Signature
1	Dr. Shijith Kumar C	Overall supervision and coordination, Report writing, Presentation, evaluation of the software system, designing of new system, development of workflow, interacting with open source community.	
2.	Mr. Manohar, N	Collection and organization of faculty publications and projects, Conducting of training programmes for the faculty and students,	

		Coordination of System development, Error detection, trial running.
3	Dr. Malar G	Development of appropriate course content and content delivery modes

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## References

Bryn, H., & John, G. (2006). *eLearning Concepts and Practice*. London: Sage.

Givens, M., Macklin, L.A., & Mangiafico, P. (2017). Faculty profile systems: New services and roles for libraries. *Libraries and the Academy*, 17 (2), 235–255.